

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-03900057-2012**

Application Received: **February 23, 2012**

Plant Identification Number: **03-54-03900057**

Permittee: **Charleston Area Medical Center**

Facility Name: **General Division**

Mailing Address: **3200 MacCorkle Avenue SE, Charleston, WV 25304**

Revised: NA

Physical Location:	Charleston, Kanawha County, West Virginia
UTM Coordinates:	445.19 km Easting • 4244.56 km Northing • Zone 17
Directions:	From Interstate 64, take exit 100 at Leon Sullivan Way toward Capital Street. From Leon Sullivan Way, turn left onto Lee Street. Turn left onto Brooks Street and right onto Washington Street to stay on U.S. Route 60 East. Turn Left onto Morris Street and end at 501 Morris Street.

Facility Description

Charleston Area Medical Center – General Division is a hospital that is covered by Standard Industrial Classification (SIC) 8062. The hospital has a 1000 lb/hr Hospital Medical Infectious Waste Incinerator (HMIWI) with a dry injection and fabric filter dry scrubber system and waste heat recovery boiler. It incinerates medical infectious waste from three CAMC hospitals: General Hospital, Memorial Hospital, and Women's and Children's Hospital, as well as from other health organizations associated with CAMC. The HMIWI has an annual feed rate of 1,700,000 pounds.

This hospital operates one (1) hospital medical infectious waste incinerator, five (5) emergency generators, four (4) boilers, one (1) ethylene oxide sterilization unit, five (5) cooling towers, and three (3) No. 2 Fuel Oil storage tanks as permitted by R13-1772G. The hospital medical infectious waste incinerator is the only emission unit at this facility covered by the Title V permit.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2010 Actual Emissions
Carbon Monoxide (CO)	28.43	3.50
Nitrogen Oxides (NO _x)	74.44	4.99
Lead (Pb)	0.00294	0.000039
Particulate Matter (PM ₁₀)	5.48	0.32
Total Particulate Matter (TSP)	5.48	0.32
Sulfur Dioxide (SO ₂)	98.46	0.07
Volatile Organic Compounds (VOC)	3.04	0.34
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2010 Actual Emissions
Hydrogen Chloride (HCl)	1.87	0.234
Mercury (Hg)	0.014	0.00003
Cadmium	0.0015	0.000059
Dioxin/Furans	2.3 x 10 ⁻⁶	NA
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		
Greenhouse Gases	Potential Emissions	2010 Actual Emissions
Carbon Dioxide (CO ₂)	6.57 x 10 ⁴	NA
Methane (CH ₄)	2.08	NA
Nitrous Oxide (N ₂ O)	0.365	NA
Carbon Dioxide Equivalent	6.59 x 10 ⁴	NA

Title V Program Applicability Basis

This facility operates a Hospital/Medical/Infectious Waste Incinerator (HMIWI). In accordance with 40 CFR § 60.32e(i) and 45 CSR§ 18-12.1, this facility is required to have an operating permit pursuant to Title V of the Federal Clean Air Act. Furthermore, in accordance with 45 CSR§ 30-3.3.b., for any non-major source subject to 45CSR30, the Secretary shall include in the permit all applicable requirements for emission unit(s) that cause the source to be subject to this rule.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	NSR permit to establish synthetic minor status
	45CSR18	Requirements and limits for HMIWI
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60, Subpart Ce	HMIWI emission guidelines
State Only:	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-1772G	July 14, 2011	NA

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a renewal of the Title V permit. Since the last Title V Permit renewal was issued, permit modifications R13-1772F and R13-1772G were issued to the facility; however the changes did not affect the HMIWI.

45CSR18 was revised on June 16, 2011 to address the changes to 40 CFR Part 60 Subpart Ce made in the October 6, 2009 amendment. 45CSR§18-7.2.j. states that one year after the effective date of U.S. EPA's approval of the 111(d)/129 State Plan revision for HMIWI units, the facility will no longer be subject to 40 C.F.R. 60, Subpart Ce as

promulgated on September 15, 1997 and will be subject to the requirements of 40 C.F.R. 60, Subpart Ce as amended on October 6, 2009. The date of US EPA's approval of the 111(d)/129 State Plan revision was March 26, 2012. The effective date for the 40 CFR 60, Subpart Ce requirements as amended on October 6, 2009 is March 26, 2013. Following are the changes that were made as a result of the new requirements:

- From the emissions guidelines there is a new opacity limit of 6% instead of 10% (Condition 4.1.8).
- New emission limit concentrations from the emissions guidelines as amended on October 6, 2009 were included (Condition 4.1.9). The active R13 permit has emission limitations given in concentration, PPH, and TPY. Compliance with the new concentration limitations will show compliance with the less stringent concentration limits of R13-1772.
- The following are new testing requirements that were added: testing methods of 40 CFR §§60.56c(b)(7)&(8), and fugitive emission testing requirements under 40 CFR §60.56c(b)(14) as conditions 4.3.1.b.7, 4.3.1.b.8, and 4.3.1.b.14.
- The following are recordkeeping requirements that were added: 40 CFR §§ 60.58c(b)(2)(ii), (b)(2)(viii), (b)(2)(xvii) as conditions 4.4.1.a.2.ii, 4.4.1.a.2.viii, and 4.4.1.a.2.xi.
- Additional changes were made to the citations for 45CSR18 in conditions 4.1.6., 4.1.7., 4.1.8., 4.1.9., 4.2.1., 4.3.1., 4.4.1., 4.5.2.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR13	R13-1772G references 40 CFR § 60.57c(c) as an applicable requirement, however the CAMC - General Division's HMIWI does not use something other than a dry scrubber. R13-1772G cites 40 CFR § 60.39e as an applicable requirement, however this requirement is for the State to meet, not the facility.
45CSR20	CAMC - General Division's HMIWI stack is less than 213 feet high, which is below the Good Engineering Practice stack height limit listed in 45CSR§20-2.4.a.
45CSR§21-40.1.	The aggregate maximum theoretical VOC emissions are less than the 100 tons per year threshold.
40 CFR part 60, subpart Ec	CAMC - General Division's HMIWI was constructed before the June 20, 1996 applicability date.
40 CFR part 64	CAMC – General Division's HMIWI is subject to 45 CSR§18-7.7a which requires owner to comply with the requirements for compliance and performance testing listed in 40 CFR §60.56c which includes continuous compliance determination methods, therefore this facility is exempt from CAM in accordance with 40 CFR § 64.2(b)(1)(i).

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: August 14, 2012
Ending Date: September 28, 2012

All written comments should be addressed to the following individual and office:

Robert Mullins
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Robert Mullins
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1243 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

The following were the comments made by EPA Region III Environmental Engineer Mike Gordon and the responses to those comments:

#1

Conditions 4.1.6, 7, 8, and 9, 4.2.1, 4.3.1, 4.4.1 - remove the citations to emissions guidelines (40 CFR 60 subpart Ce) at the end of each condition. Emissions guidelines aren't applicable requirements for facilities, they are only guidelines to states to develop a state plan (i.e. 45CSR18, which in turn becomes an applicable requirement after approval), so you only need to cite 40 CFR part 62 (where approval of the state plan is published) and 45CSR18.

The above mentioned citation of 40 CFR 60 Subpart Ce has been removed for above mentioned conditions.

#2

Condition 4.3.1.c.i - Remove "(not including startup shutdown and malfunction)" since it is not part of §60.56c.

The language "(not including startup, shutdown, and malfunction)" was removed from condition 4.3.1.c.i.